Engaging with the Nature-Based Solutions coalition for the Climate Action Summit 3 May 2019

i. Title/Heading: Bankable Water Solutions (BWS)

ii. Context and rationale.

Sustainable management of the world's water has become one of the most pressing issues we face today. Decades of mismanagement, underinvestment, and weak policies – often due to a low appreciation of the diverse values of healthy river systems or the proper management of groundwater – have placed water resources under increasing strain.

However, there is a huge opportunity in front of us: the Organization for Economic Co-operation and Development (OECD) estimates that at least US\$1 trillion of annual investment is needed for wastewater treatment, water plants, and supply networks alone. A significant proportion of the trillion-dollar-plus investment need is made up of projects with the potential for strong business models and revenue profiles that are attractive to the private sector.

WWF is working to fill this investment gap by looking at Bankable Water Solutions to identify and vet a pipeline of bankable projects to protect and sustain Freshwater ecosystems in priority basins.

iii. An overview of the contribution:

Investors, banks and private companies are investing heavily in water-related infrastructure and they are hungry to invest in more sustainable water projects, but there is no pipeline of viable projects. WWF is taking action to support the development of a pipeline of investable or 'Bankable Projects' and to ensure that these are delivering against a broader landscape finance plan to support the development of more climate resilient and sustainable landscapes and economies. A bankable project 1) in many cases uses blended finance, 2) has a positive environmental impact and 3) generates a positive return for certain stakeholders.

We look beyond the individual project and create an enabling environment for investors to support the sustainable financing of landscapes. Since WWF operates at the landscape level, we can create projects at the right scale to attract investors and crucially link the cumulative impacts of these projects. We have developed relationships with various Financial Institutions, including public and private institutions, banks and investors.

iv. How the contribution leverages living natural systems as a solution to avert climate change?

Investments in our basins are inevitable and essential. We have a chance to ensure that needed investments have a positive impact on nature and water. Instead of us fighting to halt poorly planned infrastructure projects, we can use our expertise and partners to drive more desirable outcomes. From large infrastructure programmes using our system scale planning approach to the latest cleantech solutions – these can all have a positive impact if we are part of the design and investment process. The majority of the bankable water solutions to date have included aspects of carbon reduction (solar energy), wetland restoration or landscape solutions that use ecosystem based solutions to ensure climate resilience (and bankability).

To be sustainable, bankable freshwater projects must have a positive effect on the environment: some improve the management of water resources or mitigate negative impacts, while others prevent the fragmentation and degradation of watersheds, rivers and wetlands. The following are high-level examples of bankable projects with ecosystem services as part of climate change adaptation or mitigation.

- Sustainable practices on farms close to Australia's Great Barrier Reef, which were introduced to curb river pollution that was damaging the reef. These projects have significant financial and environmental benefits. As well as more sustainable farming practices, we also see huge potential for projects that

improve the efficient use of water in agricultural irrigation. However, a prerequisite is that water allocation needs to be properly managed – otherwise it does not lead to a reduction in water usage.

- Healthy ecosystems are better at filtering pollution, they generate more plentiful and higher-quality water for residential and commercial end-users. Upkeep costs for the public authorities that manage them and for taxpayers are also reduced. Last year, UK utility Anglian Water raised £250 million in a green bond jointly arranged by ING. The proceeds will be used to tackle a broad range of ecosystem-related issues, including resilience, drought, and water recycling.
- In California, privately funded forest restoration programmes the removal of excess vegetation to return the region's forests to a thinner and healthier state – are cutting the risk of wild fires. They are also enabling more water to flow through to reservoirs and farms rather than being soaked up by unwanted plants. By reducing costs, these programmes benefit both forest managers and downstream water utilities. The work is funded by a 'Forest Resilience Bond', which pays out to investors provided projects meet pre-agreed goals.
- Another example comes from the Haringvliet in the Netherlands, where the local authority has converted an agriculture area into a wetland. It has reserved a small part for housing and is using the proceeds of property sales to fund ecosystem restoration for the area as a whole. Rising land values have helped make the project bankable.
 - v. How might the contribution support both climate, mitigation and adaptation as well as other important co-benefits and social, economic and environmental outcomes in coming years. They may include:
 - a. Reduction in carbon emission and carbon capture (GTonnes) improved wastewater treatment technology or solar solutions.
 - b. Increasing climate resilience improved water supply security through wetland restoration.
 - c. Social impact (job increase; poverty reduction; Just transition, etc.) project dependent.
 - Net economic impact (total in US\$; how was it achieved?) an example currently being development is the Kafue, with approximately 80million USD projected investments (both grants and bankable) to ensure climate resilience and economic stability of the region.
 - e. Impact on realization of the 2030 Agenda for Sustainable Development (in particular SDGs 1,2,6,12,13,14,15,16) project dependent.
 - f. Food security project dependent.
 - g. Minimising species extinction and ecological losses and fostering an increase of biodiversity. project dependent.
 - vi. Which countries and organisations are involved in the contribution?

There are currently 43 potential project ideas across 27 different basins. All have their individual context in terms of organisational involvement. The scope is global, depending on where the bankable water solutions are situated.



- vii. How have stakeholders (for example local communities, youth and indigenous peoples, where applicable) been consulted in developing the contribution? *This is project dependent.* According to WWF codes and practices, all relevant local communities are consulted.
- viii. Where can the contribution be put into action? *See above in terms of the geography of scope.*
- ix. How the contribution will be delivered? How will different stakeholders be engaged in its implementation? What are the potential transformational impacts?

By playing a catalytic role, WWF will leverage hundreds of millions dollars of private capital investments in sustainable projects with a positive impact on our freshwater ecosystems to help conserve and restore river basin ecosystems. To achieve this, we have established a WWF enabling team (hosted by WWF-Netherlands), an advisory panel of experts from financial institutions, an investment platform and seed funding. ING (a bank) and BCG (consulting group) have been especially instrumental partners. We will work with a range of partners: global companies, development finance institutions, commercial banks and (impact) investors. Everything is in place. Financial institutions are waiting to pour funds into bankable freshwater projects. The UN and World Bank High Level Panel on Water has just called for a doubling of investment in sustainable water infrastructure. We have identified a pipeline of projects and held our first external consultation. The impacts of Bankable Water Solutions will be transformative in landscapes across the globe by making previously inaccessible finance for the environment available.

- x. Is this initiative contributing to other Climate Action Summit workstreams (industry transition; energy transition; climate finance and carbon pricing; infrastructure, cities and local action; resilience and adaptation; youth and citizen mobilization; social and political drivers; mitigation strategy)? Yes climate finance, energy transition (funding solar), infrastructure and adaptation.
- xi. How does this contribution build upon examples of experience to date? How does the contribution link with different ongoing initiatives?

WWF has unique experience to catalyse sustainable water investments due to our global reach and on-the-ground work in major river basins, expertise on sustainable finance and green water infrastructure, strong relationships with various funding organisations, and our ability to partner with the private sector and work with government.

xii. What are the mechanisms for funding (with specific emphasis on potential for partnerships)?

WWF will identify bankable projects, project sponsors and financiers and help fund the initial stages before handing the projects over to the identified sponsors. The following figure indicates the scalability of bankable water solutions, where the initial seed funding is used to leverage investments at a larger scale. Thereafter, replication can take place once pilots have been proven.



- xiii. What are the means of stewardship, metrics for monitoring? The number of projects that are funded considering nature-based solutions, especially projects that support increasing water-related resilience against climate change.
- xiv. What is the communication strategy? Communication of each project is dependent on the context. Since many projects include commercial banking transactions, there is a high level of confidentiality apportioned to some of the funding opportunities.
- what are the details of proponents (indicating the degree of commitment among the countries and organizations that are named).
 The following projects are the closest to implementation, and therefore would be the strongest proponents. Each have a series of companies and WWF offices as well as other partners involved.

Pipeline	Size	Status	Туре
Büyük Menderes: Turkey	\$ 5-12 M	Feasibility studies underway for all factories, first loans signed	Cleantech
Kanpur: India	\$2-20 M	Pre-feasibility under execution	Cleantech
Bistret: Romania	\$ 70-133 M	Pre-feasibility under DTP Danube Floodplain (€3.9 M)	Mixed
Zambia: Kafue	\$ 100 M	Pre-feasibility with FMO & ABI	Mixed
Farming Great Barrier Reef: Australia	> \$140 M	ANZ interested	Agriculture
Lahore: Pakistan	\$ 10 M	Pre-feasibility under preparation	Cleantech
Haringvliet: Netherlands	\$ 100 M	Pre-feasibility tendered & ING and ABN-AMRO	Real estate
Taihu Basin: China	\$ 23 M	Pre-feasibility under execution	Cleantech